

(SOLUTIONS)

1. **Amazon Web Services (AWS)** is a collection of remote computing services, also called web services, that make up a cloud computing platform by Amazon.com. The most central and well-known of these services are Amazon EC2 and Amazon S3. The service is advertised as providing a large computing capacity (potentially many servers) much faster and cheaper than building a physical server farm.

Benefits:-

1. **Easy to use:-** AWS is designed to allow application providers, ISVs, and vendors to quickly and securely host your applications - whether an existing application or a new SaaS-based application. You can use the AWS Management Console or well-documented web services APIs to access AWS's application hosting platform.
2. **Flexible:-** AWS enables you to select the operating system, programming language, web application platform, database, and other services you need. With AWS, you receive a virtual environment that lets you load the software and services your application requires. This eases the migration process for existing applications while preserving options for building new solutions.
3. **Cost effective:-** You pay only for the compute power, storage, and other resources you use, with no long-term contracts or up-front commitments. For more information on comparing the costs of other hosting alternatives with AWS, see the AWS Economics Center.
4. **Reliable:-** With AWS, you take advantage of a scalable, reliable, and secure global computing infrastructure, the virtual backbone of Amazon.com's multi-billion dollar online business that has been honed for over a decade.
5. **Scalable and High Performance:-** Using AWS tools, Auto Scaling, and Elastic Load Balancing, your application can scale up or down based on demand. Backed by Amazon's massive infrastructure, you have access to compute and storage resources when you need them.
6. **Secure:-** AWS utilizes an end-to-end approach to secure and harden our infrastructure, including physical, operational, and software measures. For more information, see the AWS Security Center.

Application Solutions:- AWS offers a reliable and flexible cloud infrastructure platform that enables customers to run any type of

business application, from small departmental solutions to mission-critical applications in a secure and robust environment.

2. **Amazon Elastic Compute Cloud (EC2)**:- It is a central part of Amazon.com's cloud computing platform, Amazon Web Services (AWS). EC2 allows users to rent virtual computers on which to run their own computer applications. EC2 allows scalable deployment of applications by providing a Web service through which a user can boot an Amazon Machine Image to create a virtual machine, which Amazon calls an "instance", containing any software desired. A user can create, launch, and terminate server instances as needed, paying by the hour for active servers, hence the term "elastic". EC2 provides users with control over the geographical location of instances that allows for latency optimization and high levels of redundancy.

Functions:-

Account Attributes

AMIs

AWS Marketplace

Bundle Tasks

ClassicLink

Customer Gateways (Amazon VPC)

DHCP Options (Amazon VPC)

Elastic Block Store

Elastic IP Addresses

Elastic Network Interfaces (Amazon VPC)

Instances

Internet Gateways (Amazon VPC)

Key Pairs

Network ACLs (Amazon VPC)

Placement Groups

Regions and Availability Zones

Reserved Instances

Route Tables (Amazon VPC)

Security Groups

Spot Instances

Subnets (Amazon VPC)

Tags

VM Import

VM Export

VPCs (Amazon VPC)

VPC Peering Connections (Amazon VPC)

VPN Connections (Amazon VPC)

Virtual Private Gateways (Amazon VPC)